



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

NOTES AND ABSTRACTS

FRANCIS GALTON ON EUGENICS

DISCUSSION IN THE SOCIOLOGICAL SOCIETY, LONDON¹

DR. HADDON² said: We have been greatly favored this afternoon in listening to one who has devoted his life to science and has just presented us, in so able a paper, with the conclusions of his mature age. Future generations will hold the name of Dr. Galton in high reverence for the work he has done in so firmly establishing the theory of evolution, and I consider that we have listened to a memorable paper, which will mark a definite stage in the history of the subject with which Dr. Galton's name will remain imperishably associated. It is refreshing, if Dr. Galton will allow me to say so, to find a man of his years formulating such a progressive policy; for this is generally supposed to be a characteristic of younger men; but he has done so because all his life he has been studying evolution. He has seen what evolution has accomplished among the lower animals; he has seen what man can do to improve strains of animals and plants by means of careful selection; and he foresees what man may do in the future to improve his own species by more careful selection. It is possible for people to change their customs, ideas, and ideals. We are always accustomed to regard the savages as conservative, and so they are; but, as a matter of fact, savages do change their views. In Australia we find that different tribes have different marriage customs and different social regulations, and it will be generally found that the change in marriage custom or social control is nearly always due to betterment in their physical conditions. The tribes which, as some of us believe, have the more primitive marital arrangements, are those which live in the least favored countries; and the tribes which have adopted father-right are those which live under more favorable conditions. In Melanesia, Africa, and in India social customs vary a very great deal, and this proves that even their marriage customs are not in any way hide-bound, and that social evolution is taking place. When circumstances demand a change, then a change takes place, perhaps more or less automatically, being due to a sort of natural selection. There are thinking people among savages, and we have evidence that they do consider and discuss social customs, and even definitely modify them; but, on the whole, there appears to be a general trend of social factors that cause this evolution. There is no reason why social evolution should continue to take place among ourselves in a blind sort of way; for we are intelligent creatures, and we ought to use rational means to direct our own evolution. Further, with the resources of modern civilization, we are in a favorable position to accelerate this evolution. The world is gradually becoming self-conscious, and I think Dr. Galton has made a very strong plea for a determined effort to attempt a conscious evolution of the race.

DR. MOTT³ said: I have to say that I think it is of very great importance to the nation to consider this subject of eugenics very seriously. Being engaged as pathologist to the London County Council Asylums, I see the effect of heredity markedly on the people admitted into the asylums. The improve-

¹ This *Journal*, Vol. XI, p. 11.

² F.R.S.; lecturer on anthropology, Cambridge University; ex-president of the Anthropological Institute.

³ F.R.S.; Croonian lecturer, etc.; pathologist to the London County Council Asylums, etc.

ment of the stock can in my opinion be brought about in two ways: (1) by segregation, to some extent carried on at present, which in some measure checks the reproduction of the unfit; and (2) by encouraging the reproduction of the fit. Checking the reproduction of the unfit is quite as important as encouraging the reproduction of the fit. This, in my opinion, could be effected, to some extent, by taking the defective children and keeping them under control, at least a certain number that are at present allowed to have social privileges. It would be for their own welfare and the welfare of the community; and they would suffer no hardship, if taken when quite young. This is included in the question of eugenics which Dr. Galton has brought forward, and has shown his practical sympathy with, by establishing a fellowship, which will, no doubt, do great good in placing the subject on a firm basis, and also in getting a wide intellectual acceptance of the principle. It seems to me the first thing required is that it should become generally known that it is to the advantage of the individual and of the race to have a healthy heritage. Whether any practical steps could be taken to forward this principle, when it has a widespread acceptance, is a question; and I consider that any state interference would be harmful at first, but it would be proper for the state to encourage setting up registry offices where not only a form would be given, with particulars as to marriage, but also a form that would give a bill of health to the contracting parties; and that bill of health should be of some value, not only to the possessors, but to their children. If children had a good heritage, there is no doubt it would have actuarial value, in the matter, for instance, of obtaining life-insurance policies at a more reasonable rate; also in obtaining municipal and government employment, because the chances of paying pensions to people who have a good heritage is very much less. It seems to me that the subject is one of national importance, and this society, by spreading the views of Dr. Galton, will do a very great work, not only for individuals, but for the race as a whole.

MR. A. E. CRAWLEY⁴ said: Dr. Galton's remarkable and suggestive paper shows how anthropological studies can be made fruitful in practical politics. Sociology should be founding its science of eugenics upon anthropology, psychology, and physiology. I hope that it will avoid socialistic dreams and that, while chiefly considering the normal individual, it will not forget the special claims of those abnormal persons whom we call geniuses. In a well-ordered state they should be considered before the degenerate and the diseased.

With regard to one or two minor matters: I should like to ask the author if he has examined the evidence for McLennan's examples of marriage by capture. It is not, perhaps, a very important point, but anthropological theories are often houses of cards, and I doubt the existence of a single real case of capture as an institution. As to exogamy, it is important to understand that in the great majority of cases it is really endogamous, that is to say, the favorite marriage in exogamy is between first cousins, and the only constant prohibition is that against the marriage of brothers and sisters. Exogamy, in fact, as Dr. Howitt, Dr. Frazer, and myself agree, reduces to this one principle. McLennan, the inventor of exogamy, never understood the facts, and the term is meaningless. If, as I have suggested in *Nature*, the normal type of primitive marriage was the bisectional exogamy seen in Australia, which amounts to cross-cousin marriage, two families, A and B, intermarrying for generation after generation—we have found a theory of the origin of the tribe, an enlarged dual family, and we have also worked out a factor which may have done much to fix racial types. Lewis Morgan suggested something of the latter notion as a result of his consanguine family.

I am still persuaded that one or two forms of union are mere "sports;" group-marriage, for instance, which is as rare as the marriage of brother and sister. Neither of these can be regarded as the primal type of union, though anthropologists have actually so regarded them. I think we may take it as

⁴ Author of *The Mystic Rose*; one of the ablest of the younger anthropologists.

certain that there are two permanent polar tendencies in human nature: first, against union within the same home, and, secondly, against too promiscuous marriage.

In questions like this I think it is most important to avoid confusing sexual with matrimonial concerns. It seems to me, on the evidence of history and anthropology, that polygamy is the result of such a confusion. For efficiency and individuality monogamy is the best foundation of the family. Dr. Galton has not, I think, shown any cause for concluding that the prohibition of polygamy is due to social considerations. Schopenhauer indeed suggested the adoption of polygamy as a solution of the problem created by the preponderance of females, and as likely to do away with what he thought to be a false position, that of the lady—a position due to Christian and chivalrous sentimentalism. His suggestion, by the way, shows the same confusion between sexual and domestic matters, but it certainly would solve many social difficulties. The sexual impulse in men seems to have several normal outlets. In spite of defects, the ancient Greeks in their best period seem to show the results of an unconscious eugenic tradition; and I believe the same is true of the Japanese.

Dr. Galton's suggestions as to the part religion may play in these matters seem to me to be excellent. Religion can have no higher duty than to insist upon the sacredness of marriage, but, just as the meaning and content of that sacredness were the result of primitive science, so modern science must advise as to what this sacredness involves for us in our vastly changed conditions, complicated needs, and increased responsibilities.

DR. ALICE DRYSDALE VICKERY said that there appeared to her to be three essentials to success in any attempt to improve the standard of health and development of the human race. These were (1) the economic independence of women, so as to render possible the exercise of selection, on the lines of natural attraction, founded on mental, moral, social, physical, and artistic sympathies, both on the feminine and masculine side; (2) the education of the rising generation, both girls and boys, so as to impress them with a sense of their future responsibilities as citizens of the world, as co-partners in the regulation of its institutions, and as progenitors of the future race; (3) an intelligent restriction of the birth-rate so that children should be born only in due proportion to the requirements of the community, and under conditions which afforded a reasonable prospect of the efficient development of the future citizens.

The present economic dependence of women upon men was detrimental to the physical, intellectual, and moral growth of woman, as an individual. It falsified and distorted her views of life, and, as a consequence, her sense of duty. It was above all prejudicial to the interests of the coming generation, for it tended to diminish the free play and adequate development of those maternal instincts on which the rearing and education of children mainly depended. The economic independence of women was desirable in the interests of a true monogamic marriage, for, without this economic independence, the individuality of woman could not exercise that natural selective power in the choice of a mate which was probably a main factor in the spiritual evolution of the race. Where the sympathetic attraction between those concerned was only superficial, instead of being deeply interwoven in all their mutual interests and tastes, the apparent monogamic relation only too frequently masked an unavowed polygamy, or polyandry, or perhaps both. Therefore it would forward truly monogamic marriage if greater facilities should be afforded for the coming together of those who were spontaneously and pre-eminently attracted to each other.

In respect of limitations of offspring, we had to consider both organic and social criteria. For the determination of these, physiologist must combine with sociologist. From the individual and family point of view, we wanted guidance in determining the size of family adapted to given conditions, and from the social point of view we wanted guidance in determining the

numbers of population adapted to a given region at a given time. Incidentally it was here worth noting that in the case of Great Britain, the present birth-rate of 28 per 1,000, with a death-rate of 15 per 1,000, giving an excess of 13 per 1,000, compared with a birth-rate of 36 per 1,000, and death-rate of 23 per 1,000, shown by the vital statistics of 1877; but yet the lower contemporary birth-rate gave the same, or a rather higher, yearly increase, i. e., rather over 400,000 per annum, and with this annual increment of between 400,000 and 500,000, we had to remember that there fell upon the nation the burden of supporting over a million paupers, and a great number of able-bodied unemployed. It seemed, therefore, desirable that sociologists should investigate the conditions and criteria of an optimum increase of population. The remarkable local and class differences in the birth-rate were well known. If the birth-rate of 18 per 1,000 and death-rate of 15 per 1,000 which prevailed in Kensington could be made universal throughout the United Kingdom, it would give, from our total population of 42,000,000, a yearly increment beginning at 130,000. Incidentally she wished to call attention to a paper by M. Gabriel Giroud which went to show that the food-supplies of the human race are insufficient, and that one-third of the world's inhabitants exist habitually in a condition of semi-starvation.

The propositions which she desired to submit were (1) that sexual selection, as determined by the individuality of the natural woman, embodies eugenic tendencies, but that these tendencies are more or less countered and even reversed by a process of matrimonial social selection determined by the economic dependence of woman in contemporary occidental society—in short, that eugenics may be promoted by assuring an income to young women; (2) that artificial control of the birth-rate is a condition of eugenics.

MR. SKRINE said: Dr. Galton, in treating of monogamy, says that polygamy is now permitted to at least one-half of the human race. I have lived for twenty-one years among polygamists, and, having come home to Europe, I seem to see conditions prevailing which are not in essence dissimilar. The conclusion I have arrived at is that monogamy is purely a question of social sanction, a question, as it were, of police. In regard to endogamy, we may trace back its origin to periods before the dawn of history. The origin of caste and endogamous marriage is due, I believe, to the rise of powerful or intellectual families, which everywhere tend to draw to themselves less powerful families. The higher family was looked up to, and it was thought an honor to marry within it. And thus a small group was formed by a combined process of social and sexual election. The history of certain group formations determined by this sort of marriage selection might be compiled from that royal stud-book, the *Almanac de Gotha*. There is, it is true, the method of evading the selective process by the custom ofmorganatic marriage, but that only proves the rule. Dr. Galton has not touched on polyandry; that, I think, may be interpreted as one of the devices for limiting population, and can be accounted for, I believe, by scarcity of land.

DR. WESTERMARCK, speaking from the chair, said: Ladies and Gentlemen: The members of the Society have today had an opportunity to listen to a most important and suggestive paper, followed by a discussion in which, I am sure, all of us have taken a lively interest. For my own part, I beg to express my profound sympathy and regard for Mr. Galton's ardent endeavors to draw public attention to one of the most important problems with which social beings, like ourselves, could be concerned. Mr. Galton has today appealed to historical facts to prove that restrictions in marriage have occurred and do occur, and that there is no reason to suppose that such restrictions might not be extended far beyond the limits drawn up by the laws of any existing civilized nation. I wish to emphasize one restriction not yet touched upon. The husband's and father's function in the family is generally recognized to be to protect and support his wife and children, and many savages take this duty so seriously that they do not allow any man to marry who has not previously given some proof of his ability to fulfil it. Among various Bechuana and Kafir tribes the youth is not allowed to take a wife until he has killed a rhinoceros. Among the Dyaks of Borneo, and other peoples in the Malay Archipelago, no one can marry unless he has acquired

a certain number of human heads by killing members of foreign tribes. Among the Arabs of Upper Egypt the man must undergo an ordeal of whipping by the relations of his bride, and if he wishes to be considered worth having, he must receive the chastisement, which is sometimes exceedingly severe, with an expression of enjoyment. [Laughter.] I do not say that these methods are to be recommended, but the idea underlying them is certainly worthy of imitation. Indeed, we find in Germany and Austria, in the nineteenth century, laws forbidding persons in actual receipt of poor-law relief to contract marriages, and in many cases the legislators went farther still and prohibited all marriages until the contracting parties could prove that they possessed the means of supporting a family. Why could not some such laws become universal, and why could not the restrictions in marriage be extended also to persons who, in all probability, would become parents of diseased and feeble offspring? I say, "in all probability," because I do not consider certainty to be required. We cannot wait till biology has said its last word about the laws of heredity. We do not allow lunatics to walk freely about, even though there be merely a suspicion that they may be dangerous. I think that the doctor ought to have a voice in every marriage which is contracted. It is argued, of course, that to interfere here would be to intrude upon the individual's right of freedom. But men are not generally allowed to do mischief simply in order to gratify their own appetites. It will be argued that they will do mischief even though the law prevent them. Well, this holds true of every law, but we do not maintain that laws are useless because there are persons who break them. There will always in this world be offspring of diseased and degenerated parents, but the law may certainly in a very considerable degree restrict their number by preventing such persons from marrying. I think that moral education also might help to promote the object of eugenics. It seems that the prevalent opinion, that almost anybody is good enough to marry, is chiefly due to the fact that in this case the cause and effect, marriage and the feebleness of the offspring, are so distant from each other that the nearsighted eye does not distinctly perceive the connection between them. Hence no censure is passed on him who marries from want of foresight, or want of self-restraint, and by so doing is productive of offspring doomed to misery. But this can never be right. Indeed, there is hardly any other point in which the moral consciousness of civilized men still stands in greater need of intellectual training than in its judgments on cases which display want of care or foresight. Much progress has in this respect been made in the course of evolution, and it would be absurd to believe that we have yet reached the end of this process. It would be absurd to believe that men would forever leave to individual caprice the performance of the most important and, in its consequences, the most far-reaching function which has fallen to the lot of mankind.

DR. DRYSDALE said he would like to ask the chairman if he was aware that some of the restrictions he had referred to were actually in force in England. In some of the great English banks, for instance, clerks are not allowed to marry until their salary has reached a certain level. But for his part he thought the principle unsound. Would it not be better to say to these young men that they might marry, but that they must restrict the number of their children?

WRITTEN COMMUNICATIONS

FROM PROFESSOR B. ALTAMIRA⁵: The subjects of Mr. Galton's communications are very interesting, and there should be some very valuable information forthcoming on the forms of marriage (endogamy, exogamy, etc.) to be unearthed from the actual juridical manners and customs of Spain. It is a great source of regret to me that pressure of other duties prevents me at present from making any contribution to the subject.

FROM DR. HAVELOCK ELLIS: The significance of Mr. Galton's paper lies less in what is said than in what is implied. The title, "Restrictions in Marriage," bristles with questions. We need to know precisely what is meant by "marriage."

⁵ Professor of the history of law in the University of Oviedo.

Among us today marriage is a sexual union recognized by law, which is not necessarily entered into for the procreation of children, and, as a matter of fact, frequently remains childless. Mr. Galton seems, however, to mean a sexual union in which the offspring are the essential feature. The distinction is important, for the statements made about one kind of marriage would not hold good for the other. Then, again, by "restrictions" do we mean legal enactments or voluntary self-control?

Mr. Galton summarizes some of the well-known facts which show the remarkable elasticity of the institution of marriage. By implication he asks whether it would not be wise further to modify marriage by limiting or regulating procreation, thus introducing a partial or half monogamy, which may perhaps be called — borrowing a term from botany — *hemigamy*. I may point out that a fallacy seems to underlie Mr. Galton's implied belief that the hemigamy of the future, resting on scientific principles, can be upheld by a force similar to that which upheld the sexual taboos of primitive peoples. These had a religious sanction which we can never again hope to attain. No beliefs about benefits to posterity can have the powerful sanction of savage taboos. Primitive marriage customs are not conventions which everyone may preach for the benefit of others, and anyone dispense with for himself.

There is one point in Mr. Galton's paper which I am definitely unable to accept. It seems to be implicitly assumed that there is an analogy between human eugenics and the breeding of domestic animals. I deny that analogy. Animals are bred for points, and they are bred by a superior race of animals, not by themselves. These differences seem fundamental. It is important to breed, let us say, good sociologists; that, indeed, goes without saying. But can we be sure that, when bred, they will rise up and bless us? Can we be sure that they will be equally good in the other relations of life, or that they may not break into fields for which they were not bred, and spread devastation? Only a race of supermen, it seems to me, could successfully breed human varieties and keep them strictly chained up in their several stalls.

And if it is asserted that we need not breed for points, but for a sort of general all-round improvement, then we are very much in the air. If we cannot even breed fowls which are both good layers and good table birds, is it likely that we can breed men who will not lose at other points what they gain at one? (Moreover, the defects of a quality seem sometimes scarcely less valuable than the quality itself.) We know, indeed, that there are good stocks and bad stocks, and my own small observations have suggested to me that we have scarcely yet realized how subtle and far-reaching hereditary influences are. But the artificial manipulation of human stocks, or the conversion of bad into good, is still all very dubious.

It would be something, however, if we could put a drag on the propagation of definitely bad stocks, by educating public opinion and so helping forward the hemigamy, or whatever it is to be called, that Mr. Galton foresees. When two stocks are heavily tainted, and both tainted in the same direction, it ought to be generally felt that union, for the purposes of procreation, is out of the question. There ought to be a social conscience in such matters. When, as in a case known to me, an epileptic woman conceals her condition from the man she marries, it ought to be felt that an offense has been committed serious enough to annul the marriage contract. At the same time, we must avoid an extreme scrupulosity. It is highly probable that a very slight taint may benefit rather than injure a good stock. There are many people whose intellectual ability, and even virtues as good citizens, seem to be intimately bound up with the stimulating presence of some obscure "thorn in the flesh," some slight congenital taint. To sum up: (1) let us always carefully define our terms; (2) let us, individually and as a nation, do our best to accumulate data on this matter, following, so far as we can, the example so nobly set us by Mr. Galton; (3) let us educate public opinion as to the immense gravity of the issues at stake; (4), in the present state of our knowledge, let us be cautious about laying down practical regulations which may perhaps prove undesirable, and in any case are impossible to enforce.

FROM MRS. FAWCETT: Mr. Galton evidently realizes that he has a gigantic task before him, that of raising up a new standard of conduct on one of the most fundamental of human relations. At present, the great majority of men and women, otherwise conscientious, seem to have no conscience about their responsibility for the improvement or deterioration of the race. One frequently observes cases of men suffering from mortal and incurable disease who apparently have no idea that it is wrong to have children who will probably enter life heavily handicapped by inherited infirmity.

Two-thirds of what is called the social evil would disappear of itself, if responsibility for the welfare of the coming generation found its fitting place in the conscience of the average man.

I wish all success to Mr. Francis Galton's efforts.

FROM MR. A. H. HUTH⁶: Everyone will sympathize with Mr. Galton in his desire to raise the human race. He is not the first, and he will not be the last. Long ago the Spartans practiced what Mr. Galton has christened "eugenics;" and in more modern times Frederick I of Prussia tried something of the sort. I have often thought that if the human race knew what was good for them, they would appoint some great man as dictator with absolute power for a time. At the expense of some pain to individuals, some loss of liberty for, say, one generation, what might not be done! Preferably, they should choose me; not because I think myself superior to others, but I would rather make the laws than submit myself to them!

Mr. Galton shows very clearly, and, I think, indisputably, that people do submit to restrictions on marriage of very different kinds, much as if they were laws of nature. Hence the deduction is drawn that, since people submit, without, in most cases, a murmur, to restrictions which do not benefit the race, why not artificially produce the same thing in a manner that will benefit the race?

There are, however, two difficulties: One, the smaller, is that, in our present state of civilization, people will not accept, as they did in the childhood of their race, the doctrine of authority. The other is that all the restrictions on marriage cited by Mr. Galton, with the one exception of celibacy, to which I shall come later, only impeded, but did not prevent, marriage. Every man could marry under any of the restrictions, and only very few women could not lawfully be joined to him in matrimony.

Now, what is Mr. Galton's contention? He wishes to hasten the action of the natural law of improvement of the race which works by selection. He wishes to do as breeders have done in creating superior races by the selection of mates. He recognizes that, unhappily, we cannot compel people to mate as the scientist directs: they must be persuaded to do so by some sort of creed, which, however, he does not (at least in this paper) expressly define. You could not make a creed that your choice of a wife should be submitted to the approval of a high-priest or of a jury. You would not, again, submit the question from a quasi-religious point of view to the like authorities, as to whether you are to marry at all or not. Mr. Galton does indeed point out that people were doomed to celibacy in religious communities: but here you have either a superior authority forcing you to take the vows, or you have the voluntary taking of the vows. Would the undesirable, the weak, the wicked, the frivolous—any of those beings who ought not to propagate their species—take these vows? I fear not. Only the best, those who have strength of mind, the unselfish—in short, only those who should propagate their species—would take the vows with any prospect of respecting them.

I have said that Mr. Galton is seeking to hasten a natural process. We all know the Darwinian law of the selection of the fittest; and also that other law of sexual selection which is constantly going on. I think that even within historical times they have told. I think that if you study the portraits which have come down to us (excluding, of course, the idealistic productions of the Greeks and some others), if you study even the prints of the grosser multitude, and then walk down any of the more populous streets of London, you will find that you have

⁶ Author of *The Marriage of Near Kin*.

reason to congratulate the race on a decided general improvement in looks and figure. We have also undoubtedly improved in health and longevity; but this may be due, as also the improvement in looks may be partly due, to improvement in the conditions of life. But with all this, with all these natural forces working untiringly, effectively, and imperceptibly for the improvement of the race, our whole aims as a social body, all our efforts, are directed to thwart this natural improvement, to reverse its action, and cause the race, not to endeavor to better its best, but to multiply its worst.

The whole tendency of the organized world has been to develop from the system of the production of a very numerous offspring ill fitted to survive, to the production of much fewer offspring better fitted to survive, and guarded at the expense of the parents until they were started in life. This law so permeates the world, and is so general, that it is even true of the higher and lower planes of humanity. The better classes, the more educated, and those capable of greater self-denial, will not marry till they see their way to bring up children in health and comfort and give them a start in life. The lower class, without a thought for the morrow, the wastrels, the ignorant, the selfish and thoughtless, marry and produce children. Under the ordinary law of nature, of course, the natural result would follow: the children of the more desirable class, though fewer, would survive in greater proportion than the more numerous progeny of the less desirable class, and the race would not deteriorate. But here legislation, and, still worse, the so-called philanthropist, step in. Burdens are heaped upon the prudent; they are taxed and bullied; the means which they have denied themselves to save for their own children are taken from them and given to idle wastrels in order that their children may be preserved to grow up and reproduce their like. Not only are these children carefully maintained at the costs of the more prudent, but their wretched parents are fed and coddled also at the expense of the more worthy, and saved against themselves to produce more of the—shall I call them *kakogenetics*. Not content with this, we freely import from the sweepings of Europe, and add them to our breeding-stock.

In the days when England made her greatness, she did not suffer from the cankers of wild philanthropy and a promiscuous alien immigration.

FROM PROFESSOR J. G. MCKENDRICK: I am sorry that, owing to university work, I am not able at present to contribute to the discussion of Mr. Galton's very suggestive papers. He is opening up a subject of great interest and importance—more especially in its relation to improving the physical, mental, and pure qualities of the race. At present much is carried on by haphazard, and I fear the consequence is that we see indications of degeneration in various directions.

I heartily wish much success to those who are carrying on investigations of these important problems. We are all indebted to Mr. Galton for his valuable and deeply suggestive papers.

FROM MR. C. A. WITCHELL⁷: There is one factor operating in the selection of husbands and wives which will be extremely difficult to bring within the purview of eugenics, and which is yet supreme in its influence. The union of the sexes, in its higher form, is not a matter of passion, but of the more powerful and enduring sentiment which we call love. The capturing of mates is not confined to mankind; the polygamous birds exhibit it. But there are birds that sing to win a mate—these have a delayed courtship; and in man this is developed to still nobler ideals.

Let a man look around him at a public ball. Would he choose for mother of his children the woman who of all present has the greatest physical attractions? Nothing of the kind. The one he chooses (by instinct) is the one who inspires him with a certain elevation of spiritual sentiment, who, indeed, freezes his physical nature out of his thought—whom he could hardly pay a compliment to, and yet whom he knows he would select from among them all. Why does he choose her? Has he not made selection through the assessors chosen by nature—certain subtle and undefinable perceptions received through the senses of sight and hearing. These perceptions, fleet and instant messengers, have not been

⁷ Author of *The Cultivation of Man*.

delayed by social distances. They have pierced all the flimsy armour of fashion, they have penetrated the shams of culture, and have told his inmost sense of consciousness—his soul—what hers is like. By that knowledge his soul has chosen hers; and unless science can analyze this subtle process of spiritual selection, it must stand aside.

By all means let eugenics advance! But let its exponents pause to analyze first what is now the most powerful factor governing the selection of the sexes, and seek to take advantage of it rather than to stifle it with mere physical agencies. To sterilize defective types is one thing; to eliminate the criminally weak and diseased is another—equally reasonable. But let us beware lest we do anything that may tend to obliterate by physical means the higher instructive teachings of sexual selection.

FROM PROFESSOR J. H. MUIRHEAD: I think Mr. Galton's suggestions for the advance of the study and practice of eugenics most important, and hope our Society may do something to forward the subject.

FROM DR. MAX NORDAU: The shortness of the time at my disposal, and the vastness of the subject treated by Mr. Galton, do not permit me to deal with the paper as it deserves. I must limit myself to a few *obiter dicta*, for the somewhat dogmatic form of which I crave the indulgence of the Sociological Society.

Theoretically, everybody must hail eugenics. It is a fine and obviously desirable ideal, to direct the evolution of the individual and the race toward the highest possible type of humanity. Practically, however, the matter is so obscure and complicated that it can be approached only with hesitation and misgivings.

We hear often people, even scientists, say: "We breed our domestic animals and useful plants with the greatest care, while no selection and foresight is exercised in the case of the noblest creature—man." This allusion to the methods of breeding choice cattle implies a biological fallacy. The breeder knows exactly what he wants to develop in his stock; now it is swiftness, now it is staying power; here it is flesh, there it is wool; in this case it is abundance of milk, in that a capacity for transforming, quickly and completely, food into muscle and fat of a high market value. The breeder is working out the one quality he is aiming at, at the cost of *other* qualities which would be of value to the animal, if not to its owner. The selection practised by the breeder in view of a certain aim creates new types that may be economically superior, but are biologically inferior. To put it flatly: our vaunted thoroughbreds, the triumph of selection exercised for many generations, may be wonderfully adapted to the one particular end they are destined for; they may flatter our utilitarianism and fetch high prices; but their general vital power is diminished; they are less resistant to the injuries of life; they are subject to diseases far less frequently, or not at all, met with in non-selected animals of their kind, and if not constantly fostered and protected by man, they would be unable to hold their own in the struggle for life.

It is clear that we cannot apply the principles of artificial breeding to man. Which quality of his are we to develop by selection? Of course, there is the ready answer: "*Mens sana in corpore sano.*" But this is so general and vague a rule that it means nothing when it comes to practical application. There is no recognized standard of physical and intellectual perfection. Do you want inches? In that case, you have to shut out from your selection Frederick the Great and Napoleon I, who were undersized, Thiers, who was almost a dwarf, and the Japanese as a nation, as they are considerably below the average of some European races. Yet in all other respects than tallness they are very commendable specimens of our species. What is your ideal of beauty? Is it a white skin, clear eyes, and fair hair? Then you must favor the northern type and exclude the Italian, Spaniard, Greek, etc., from your selection, which would not be to the taste of these nations.

If from somatic we turn to intellectual perfection, we encounter the same difficulties. Some highly gifted individuals have inductive, others deductive talents. You cannot easily have in the same man a great mathematician and a great poet, an inventor and a statesman. You must make up your mind whether you wish to breed artists or scientists, warriors or speculative philosophers. If

you say you will breed each of these intellectual categories, each of those physical types, then it amounts to confessing that you will let things pretty much have their own way, and that you renounce guiding nature and directing consciously the species toward an ideal type. If you admit that you have *no* fixed standard of beauty and mental attainment, of physical and intellectual perfection, to propose as the aim of eugenic selection; if your artificial man-breeding is not destined to develop certain well-defined organic qualities to the detriment of others, then eugenics means simply that people about to marry should choose handsome, healthy young individuals; and this, I am sorry to say, is a mere triviality, as already, without any scientific consciousness or intervention, people *are* attracted by beauty, health, and youth, and repulsed by the visible absence of these qualities.

The principle of sexual selection is the natural promoter of eugenics; it is a constant factor in biology, and undoubtedly at work in mankind. The immense majority of men and women marry the best individual among those that come within their reach. Only a small minority is guided in its choice by considerations of a social and economical order, which may determine selections to which the natural instinct would object. But even such a choice, contrary as it seems to the principle of eugenics, might be justified to a certain extent. The noble Ernest Renan would never have been chosen for his physical appearance by any young woman of natural taste; nor would Darmesteter, the great philologist, who was afflicted with gibbosity. Yet these men had high qualities that were well worth being perpetuated in the species. A young and beautiful woman could put in a plausible plea for her marrying an elderly rich financier or nobleman of not very pleasing appearance. In both cases her proper organic qualities may vouchsafe fair offspring which will better develop in economically and socially favorable surroundings than it would have done in poverty and obscurity, even if the father had been a much finer specimen of man.

It seems to me that the problem must be approached from another side. There have been pure human races in prehistorical times. Actually every European nation represents a mixture, different in its *proportion* only, of *all* the races of Europe, and probably some of Asia and northern Africa. Probably every European has in his ancestry representatives of a great number of human types, good and indifferent ones. He is the bearer of all the potentialities of the species. By atavism, any one of the ancestral types may revive in him. Place him in favorable conditions, and there is a fair chance of his developing his potentialities and of his growing into resemblance with the best of his ancestors. The essential thing, therefore, is not so much the selection of particular individuals — every individual having probably latent qualities of the best kind — as the creating of favorable conditions for the development of the good qualities. Marry Hercules with Juno, and Apollo with Venus, and put them in slums. Their children will be stunted in growth, rickety and consumptive. On the other hand, take the miserable slum-dwellers *out* of their noxious surroundings, house, feed, clothe them well, give them plenty of light, air, and leisure, and their grandchildren, perhaps already their children, will reproduce the type of the fine, tall Saxons and Danes of whom they are the offspring.

If eugenics is only to produce a few Grecian gods and goddesses in the sacred circle of the privileged few, it has a merely artistico-aesthetic, but no politico-ethnological, interest. Eugenics, in order to modify the aspect and value of the nation, must ameliorate, not some select groups, but the bulk of the people; and this aim is not to be attained by trying to influence the love-life of the masses. It can be approached only by elevating their standard of life. Redeem the millions of their harrowing care, give them plenty of food and rational hygienics, and allow their natural sympathies to work out their matrimonial choice, and you will have done all the eugenics that is likely to strengthen, embellish, and ennoble the race. In one word: Eugenics, to be largely efficient, must be considered, not as a biological, but as an economic question.

One word more as to the restriction of marriage. There is no doubt that laws and customs have had, at all times and in all places, the effect of narrowing the circle within which the matrimonial selection could take place. But I believe it would be an error to conclude that therefore it would be within the power

of the legislator to modify these laws and customs, and to create new restrictions unknown before our own time. The old marriage laws and customs had the undisputed authority of religion, they were considered as divine institutions, and superstitious fears prevented transgression. This religious sanction would be absent from modern restricted laws, and, in the case of a conflict between passion or desire and legal prohibition, *this* would weigh as a feather against *that*. In a low state of civilization the masses obey traditional laws without questioning their authority. Highly differentiated cultured persons have a strong critical sense; they ask of everything the reason why, and they have an irrepressible tendency to be their own law-givers. These persons would not submit to laws restricting marriage for the sake of vague eugenics, and if they could not marry under such laws in England, they would marry abroad; unless you dream of a uniform legislation in all countries of the globe, which would indeed be a bold dream.

FROM PROFESSOR A. POSADA: Without entering into a discussion of the bases on which Mr. Galton has raised eugenics as a science, I find many very acceptable points of view in all that is proposed by this eminent sociologist.

The history of matrimonial relationship in itself discloses most interesting results. The relative character of its forms, the transitory condition of its laws, the very history of these would seem to show that the reflex action of opinion influences the being and constitution of the human family.

Granting this, and assuming that the actual conditions of the matrimonial régime—especially those that bear upon the manner of contract—must not be considered as the final term of evolution (since they are far from being ideal), one cannot do less than encourage all that is being done to elucidate the positive nature of matrimonial union, and the positive effects resultant from whether such union was effected with regard, or disregard, to the exigencies of generation and its influence on descendants.

Marriage is actually contracted either for love or for gain; more often than not the woman marries because she does not enjoy economic independence. In such circumstances physiological considerations, the influence of heredity, both physiological and moral, have little or no weight—perhaps because they are neither sufficiently known or demonstrated in such a manner that the disastrous effects of their disregard can induce direct motives of conduct.

On this account I think that (1) we should work to elucidate, in as scientific a manner as possible, the requirements of progressive selection in marriage, and we should rigorously demonstrate the consequences of such unions as are decidedly prejudicial to vigorous and healthy offspring; (2) we should disseminate a knowledge of the conclusions ascertained by scientific investigation and rational statistics, so that these could be gradually assimilated by public opinion and converted into legal and moral obligations, into determinative motives of conduct. But we must bear in mind that one cannot expect a transformation of actual criteria of sexual relationship from the mere establishment of a science of eugenics, nor even from the propagation of its conclusions; the problem is thus seen to be very complex.

The actual criteria applied to sexual relationships—especially to those here alluded to—depend on general economic conditions, by virtue of which marriage is contracted under the influence of a multitude of secondary social predispositions, that have no regard to the future of the race; and it is useless to think that any propaganda would be sufficient to overcome the exigencies of economic conditions. On the other hand, the actual education of both the woman and the man leaves much to be desired, and more particularly in regard to sexual relationship. And it would be futile to think of any effectual transformation in family life while both the man and woman do not each of them equally exact, by virtue of an invulnerable repugnance to all that injures morality, a purity of morals in the future spouse.

The day that the woman will refuse as husband the man of impure life, with a repugnance equal to that usually felt by man toward impure womanhood, we shall have made a great step toward the transformation of actual marriage—to the gain of future generations.

FROM PROFESSOR E. B. POULTON: I entirely agree with the aims Mr. Galton has in view, and profoundly admire his papers on this subject. I think they unfold great possibilities for the human race.

FROM HON. BERTRAND RUSSELL: I have read Mr. Galton's two papers in abstract with much interest, and agree entirely with the view that marriage customs might be modified in a eugenic direction. But I have no views of my own worth expressing in a written communication such as is asked for.

FROM PROFESSOR SERGI⁸: As an abstract proposition I believe Mr. Galton's proposal is entirely right and has many attractions. But, nevertheless, it seems to me to be not easily practicable, and perhaps even impossible.

The sexual relations are vital in the life of all animal species. Any restrictions, to be at all tolerable, must irrefutably demonstrate a great and conspicuous gain. But, unfortunately, we are ignorant of the consequences of restrictions in marriage relations.

It is important in this connection to bear in mind that in modern societies there are certain unmistakable new tendencies at work. These tendencies are all in the direction of dissolving the old restrictions, both religious and social. They constitute, in fact, a movement toward what is called "free love." Now, this tendency runs, it seems to me, counter to Mr. Galton's proposals and makes it particularly difficult to initiate any restrictions of a new form and character.

It is, I believe, an illusion to expect that from any intellectual convictions there may arise a conscious inhibition of sex-relations in the population generally. Instances are not wanting of men of high culture marrying women who are the daughters of insane and epileptic parents.

But, notwithstanding these objections, which I hold to be a most serious obstacle, and even perhaps fatal to the practical application of Mr. Galton's eugenic principles, nevertheless I believe the studies which, in the second of his two papers to the Sociological Society, he proposes to institute will be both interesting and useful.

FROM DR. R. STEINMETZ⁹: I quite agree with Mr. Galton and others (e. g., Dr. Schallmeyer, of Munich, author of *Vererbung und Auslese im Lebenslauf der Völker*, 1903) that one of the highest objects of applied sociology is the promotion of eugenic marriages. I think there is no worthier object of discussion for a sociological society than that of the means of this promotion. To be sure, the thorough and real knowledge of the true, not the expressed and the reputed, motives for introducing restrictions on marriage might be a means to this end. What we want to know is the real objective cause of these restrictions; there need not, of course, have been any conscious motive at all.

Coming to detailed examination of some points in Mr. Galton's paper on "Restrictions in Marriage," I would ask: Is it certain that prohibition of polygamy in Christian nations was due "to considerations of social well-being," as Mr. Galton has it? Surely other causes were also at work. I think, where the number of adult men and women is nearly equal, monogamy is the natural result; polygamy is possible only when, by wars and other causes, this proportion is reversed, and when other circumstances, as social inequality, allow some men to take more women than one.

A special distribution of labor between men and women may contribute to this result, but cannot be the cause of it, as every man wants the assistance of more women when he may get them. And in respect of sexual relations it has to be observed that many are polygamous in intention, and are only deterred by practical difficulties.

Social inequality, poverty, successful wars are the condition of polygamy. Economical or sexual wants drive men to it.

When these conditions are no longer fulfilled, monogamy will replace it. This is furthered by any rise in the position of women, by the freer play of the purer

⁸ Director of the Museum and Laboratory of Anthropology, University of Rome.

⁹ Lecturer on sociology in the University of Leyden.

sentiments between the sexes, and by at least official or public chastity. I believe I am so far in agreement with Westermarck's views on the question. Christianity was very ascetic, as is attested by Paul's expressions in the epistle to the Corinthians. By these ascetic tendencies Christian morals were opposed to polygamy. This tendency was enforced by the Christian ebionistic sympathies, by which all the fathers of the church were governed. Asceticism and social equality can both make for monogamy. Monogamy is certainly in accordance with one very mighty human instinct, that of jealousy; therefore it is the only democratic form of marriage. And I think it is the only one in harmony with the higher sentiments between the sexes, and with a right moral relation between offspring and parents.

But, in considering it, we should never forget that it is largely traversed by irregular love, whether this be sentimental or more sensual, and also by very general prostitution in all ages and classes.

So we must be very cautious in deducing from the fact of monogamy any conclusions as to new and rational marriage regulations, desirable as they may be.

Generally, the term "endogamy" is employed in a narrower sense than the prohibition of Greeks to marry barbarian women (concubinage with them was allowed, so the restriction was not severe).

I do not consider that Mr. Galton's view of the causes and conditions of endogamy and exogamy is in strict accordance with the results of "anthropology" (the continental term is "ethnology"); Mr. Galton thinks exogamy is usually to be found in "small and barbarous communities;" but combined with the marriage restrictions by blood-ties, and the very general horror of incest, which are only its expression, exogamy is by far the commonest rule of the Chinese; and the Hindus are exogamous in the strict sense, and in the other sense all civilized nations are exogamous, marriage between close kindred being prohibited (Post, *Grundriss der ethnischen Jurisprudenz*, 1897, pp. 37-42).

The possibility of the complicated Australian marriage system, of which we know not yet the real motives and causes, does not at all warrant the conclusion that "with equal propriety" it might be applied "to the furtherance of some form of eugenics" among the Australians or among us. The conclusion from the Australians to us stands in need of demonstration; it cannot be assumed. Is it certain that motives of the same strength as those unknown may be found?

The motives for the horror of incest we do not yet know quite certainly. Perhaps they are the result of very deep-seated and fundamental causes, which suggest the gravest caution in postulating their analogies.

As yet we are even incapable of restraining the very deplorable neo-Malthusian tendencies in the higher classes and some others in all civilized nations, nor those very generally and strongly operating in the eastern United States, in France, in English Australia. We are powerless against the dangers in this direction with which we are threatened by the widely spread feminist movement.

The race-love of civilized men and women is regretfully feeble. The real problem is first to enforce it. At present the care for future man, the love and respect of the race, are quite beyond the pale of the morals of even the best.

The nobility of old, yea, the patriarchal family generally, entertained a real love and care for the qualities of their offspring. So, perhaps, the turn for this feeling may come again. The intensification of economic and social life will raise the demands on everybody's mental and bodily capabilities; the better knowledge of the hereditary qualities and their signification in attaining the highest degree of capacity will perhaps, and I think should, in some degree inevitably waken the care for the qualities of one's own offspring.

I put much more hope on this resultant of intensified social demands, of increase and spreading of pathological knowledge, and of evermore enlightened egoism, than on public morals embracing the future of the race. Improved care for one's own offspring according to science may possibly come. The result will be a change in our ideas, morals, and morality.

The next measures that then could be taken by the legislator seem to be that

formulated by Dr. Schallmeyer in his excellent paper, "Infection als Morgengabe."¹⁰

FROM SIR RICHARD TEMPLE:

NOTE I. STUDIES IN NATIONAL EUGENICS

Topic I.—It seems to me that definitions of "gifted" and "capable" are required. Are the "gifted" to be those who perform the initiative reasoning, out of which the practical results arise? Are the "capable" to be those who bring into effect the reasoning of the "gifted"? It has always seemed to me that the work accomplished in the world is due to both classes in an equal degree. Neither can be effective without the other. Both are equally important. The success of either demands mental powers of a very high order; I am not at all sure that it is going too far to say, of an equally high order. Then there are those who combine in themselves both the capacities, the initiative reasoning and the bringing into effect. Where are these to be placed? Many who possess the one in an eminent degree also possess the other; but, as reasoning and giving effect each requires so much thought and absorbs so much energy and time, the majority have not the opportunity to perform both. I suggest that, as regards family eugenics, both the "gifted" and the "capable" be, if the above definitions are to stand, taken as divisions of one class of mankind. This should be the safest method of bringing the inquiry to a practical result, because of the tendency, so strong in human beings, to look on their own description of work as that which is of the most importance to their kind. The great practical difficulty in the inquiry on the lines indicated, that impresses itself on me is that, especially among women—owing to their place in the world's work—qualities essential to usefulness are frequently present in individuals who are otherwise possessed of no specially high mental qualities, and are therefore "unknown," and in no way remarkable; such qualities as initiative, discretion, "common-sense," perseverance, patience, even temper, energy, courage, and so on, without which the "gifted" and "capable" are apt to be of no practical value to the world. I suggest that progress represents the sum of individual capacities, past and present, at any given period among any given population in any given environment. Then again, in the prosecution of eugenics by statistics of achievement there is another great difficulty, which may be best expressed in the words of the preacher in Ecclesiastes: "I returned, and saw under the sun, that the race is not to the swift, nor the battle to the strong, neither yet bread to the wise, nor yet riches to men of understanding, nor yet favour to men of skill: but time and chance happeneth to them all." Existing social conditions and prejudices, all the world over, will force eugenical philosophy to take root very slowly. This is, perhaps, as it should be, in view of the above practical reflection.

Topic II.—It would appear that a beginning has been made, as regards men, in the Rhodes Scholarships.

NOTE II. RESTRICTIONS IN MARRIAGE

In one sense, eugenics is the oldest and most universal philosophy in the world, of which the convention called marriage is the outward and visible sign. Everywhere, among all peoples in all times, marriage was originated for the enforcement and maintenance of real or supposed eugenics. The object of the convention has been fundamentally always the same, the direct personal advantage in some tangible form of a group in its environment. All that can be done by individual philosophers is to give marriage a definite turn in a direction deemed beneficial, because human beings in a mass, in a matter affecting every individual, act upon instinct—defining instinct as unconscious reasoning. In human affairs the outward and visible sign of instinct is custom. By reasoning, instinct can be given a definite direction, and hence a definite form can be given to a custom.

¹⁰ For my own opinions on this *vide* "Die neuern Forschungen zur Geschichte der menschlichen Familie," *Zeitschrift für Socialwissenschaft*, 1899; cf. my "Die Wachswuth der Feminismus und Rasse," *ibid.*, 1904.

This has often been accomplished, but, so far as I can apprehend history, reasoning has succeeded only in creating instinct, and thus custom, when the masses subjected to its pressure have been able to see the direct personal advantage to be gained by the line taken. This is the practical point that the eugenical philosopher has to keep ever before him. A custom can be created. The questions for the philosopher are what should be created and how it should be created.

All forms of marriage are due fundamentally to considerations of well-being. Exogamy exists where it is thought important abnormally to increase the numbers of a group. Endogamy exists where it is thought important in a settled community to reserve property and social standing or power for a limited group. Monogamy, polygamy, polyandry, are all attempts to maintain social well-being in a form that has seemed obviously advantageous to different groups of human beings. Religion, taboo, and the prohibited degrees are all methods of enforcing custom by moral force. The Australian marriage system is merely a primitive, and therefore complicated, method of enforcing custom. But the human instinct as to incest is something going very deep down, as there is the same kind of instinct in some of the "higher" animals of the two sexes when stabled together, e. g., horses, elephants. Celibacy seems to be due to different causes in different circumstances, according as to whether it is enforced or voluntary. In the former case it is a method of enforcing marriage customs maintained for the supposed common good. In the latter it is due to asceticism, itself a universal instinct based on a philosophy of personal advantage.

The restrictions enforced by marriage customs have led to hypergamy, a *mariage de convenance* exchanging position and property, but really an unreasonable form of eugenics adopted because of the supposed personal advantage; and this has led, in one disastrous form, to female infanticide in a distinctly harmful degree. All the restrictions of marriage are modified in uncivilized communities by promiscuity before marriage and in civilized communities by hetairism. The greater the restrictions, the more systematic has hetairism become. Illegitimacy has taken on many almost unrecognizable forms in various parts of the world. It really represents the result of rebellion against convention. Every one of these considerations materially affects any proposition for a reform of eugenics. Caste is the outward manifestation of an endogamic marriage system by the "intellectuals" of a people for the personal advantage of their own group within the nation, and imitated without reasoning by other groups. This system of endogamic marriage, adopted for the real or supposed advantage of a group, has brought about national disaster, for it has made impossible the instinct of nationality, or the larger group, and has brought the peoples adopting it into perpetual subjection to others possessing the instinct of nationality. Its existence and practical effect are a standing warning to the eugenical philosopher, which should point out to him the extreme care that is necessary in consciously directing eugenics into any given channel.

FROM PROFESSOR TÖNNIES¹¹: I fully agree with the scope and aims of Mr. Galton's "eugenics," and consequently with the essence of the two papers proposed. But with respect to details I have certain objections and illustrations which I now try to explain.

1. There can be no doubt but that the three kinds of accomplishments are desirable in mankind: physical, mental, and moral ability. Surely the three—or, as Mr. Galton classifies them, constitution (which I understand to imply moral character) physique, and intellect—are not independent variables, but if they to a large extent are correlate, on the other hand they also tend to exclude each other, strong intellect being very often connected with a delicate health as well as with poor moral qualities, and *vice versa*. Now, the great question, as it appears to me, will be, whether eugenics is to favor one kind of these excellencies at the cost of another one or of both the other, and which should be preferred under any circumstances.

2. Under existing social conditions, it would mean a cruelty to raise the average intellectual capacity of a nation to that of its better moiety of the present

¹¹ Profesor of philosophy in the University of Kiel.

day. For it would render people so much more conscious of the dissonance between the hopeless monotony of their toil and the lack of recreation, poorness of comfort, narrowness of prospects, under which they are even now suffering severely, notwithstanding the dulness of the great multitude.

3. The rise of intellectual qualities also involves, under given conditions, a danger of further decay of moral feeling, nay, of sympathetic affections generally. Town life already produces a race of cunning rascals. Temptations are very strong indeed, to outrun competitors by reckless astuteness and remorseless tricks. Intelligence promotes egotism and pleasure-seeking, very much in contradiction to the interests of the race.

4. A strong physique seems to be correlate with some portions of our moral nature, but not with all. Refinement of moral feeling and tact are more of an intellectual nature, and again combine more easily with a weak frame and less bodily power.

5. I indorse what Mr. Galton shows, that marriage selection is very largely conditioned by motives based on religious and social connection; and I accept, as a grand principle, the conclusion that the same class of motives may, in time to come, direct mankind to disfavor unsuitable marriages, so as to make at least some kinds of them impossible or highly improbable; and this would mean an enormous benefit to all concerned, and to the race in general. But I very much doubt if a sufficient unanimity may be produced upon the question: Which marriages *are* unsuitable?

6. Of course, this unanimity may be promoted by a sufficient study of the effects of heredity. This is the proper and most prominent task of eugenics, as Mr. Galton luminously points out by his six topics to be taken in hand under the Research Fellowship. Highly though I appreciate the importance of this kind of investigations, to which my own attention has been directed at a very early date, I am apt to believe, however, that the *practical* outcome of them will not be considerable. Our present knowledge, scanty and incoherent as it is, still suffices already to make certain marriages, which are especially favored by social convention, by religion, and by custom, appear to sober-thinking men highly unsuitable. Science is not likely to gain an influence equivalent to, or even outweighing, those influences that further or restrain particular classes of marriage. On the other hand, the voice of reason, notably with respect to hygienic as well as moral considerations, is often represented by *parents* in contradiction to inclinations or even passions of their offspring (especially daughters), and the prevailing individualistic tendencies of the present age, greatly in favor of individual choice and of the natural right of love, mostly, or at least very often, dumb that voice of reason and render it more and more powerless. Eugenics has to contend against the two fronts: against the *mariage de convenance* on the one side, and the *mariage de passion* on the other.

7. But this applies chiefly to the upper strata of society, where a certain influence of scientific results may be presumed on principle with greater likelihood than among the multitude. Mr. Galton wishes the national importance of eugenics to be introduced into the national conscience like a new religion. I do not believe that this will be possible, unless the conditions of everyday existence were entirely revolutionized beforehand. The function of religion has always been to give *immediate* relief to pressing discomforts, and to connect it with hopeful prospects of an *individual* life to come. The life of the race is a subject entirely foreign to popular feelings, and will continue to be so, unless the mass should be exempt from daily toil and care, to a degree which we are unable to realize at present.

8. However, the first and main point is to secure the general *intellectual* acceptance of eugenics as a hopeful and most important study. I willingly and respectfully give my fullest sympathy and approval to this claim.

I have tried to express my sentiments here as evoked by the two most interesting papers. I have been obliged to do so in great haste, and consequently, as I am aware, in very bad English, for which I must apologize.

FROM PROFESSOR AUGUST WEISMANN: It has given me great pleasure to learn that a sociological society has been formed in England, and to see that so many distinguished names are associated with its inauguration and proceedings.

As for the request that I should send "an expression of my views on the subject" of Mr. Galton's two papers, I fear I can have nothing to say that will be at all new.

I think there is one question, however, of very great importance which has not yet, so far as I know, been investigated, and to which the statistical method alone can supply an answer. It is this: whether, when an hereditary disease, like tuberculosis, has made its appearance in a family, it is afterward possible for it to be entirely banished from this or that branch of the family; or whether, on the contrary, the progeny of these members of the family who appear healthy must not sooner or later produce a tuberculous progeny? I am fully aware that there exists already a great mass of statistical matter on the subject of "tuberculosis," but I cannot say that it seems to me sufficient, thus far, to justify a sure conclusion. Talking for myself, I am disposed, both on theoretic grounds and in view of known facts, to opine that a complete purification and re-establishment of such a family is quite possible in the cases of slighter infection. For I believe that hereditary transmission in such cases depends upon an infected condition of the seed germ or generative cell; that it is conceivable that single generative cells of the parent may remain free from bacilli; that an entirely healthy child may be developed from one such generative cell, and that from this sound shoot an entirely healthy branch of the family may grow in time. I would almost go so far as to say that, if this were *not* the case, then there could hardly be a family on earth today unaffected by hereditary disease.

Let me ask you to accept this note as merely an indication of my willingness to make at least a very small contribution to the list of those sociological problems which you aim at solving.

FROM HON. V. LADY WELBY: It is obvious that in the question of eugenic restrictions in marriage there are two points of view from which we may work: (1) that of making the most of the race, which concentrates interest, not on the parents—who are then merely, like the organism itself, the germ-carrier—but always on the children (in their turn merely race-bearers); and (2) that of making the most of the individual, and thus raising the standard of the whole by raising that of its parts. May we not say that we must learn to marry these points of view? Indeed, already they may be said to be married in actual family life; for, in a certain sense, the mother represents the first, and the father the second.

In my small contribution to the discussion on Mr. Galton's first paper I appealed to women to realize more clearly their true place and gift as representing their original racial motherhood, out of which the masculine and feminine characters have arisen. It seems advisable now to take somewhat wider ground.

When, in the interests of an ascending family ideal, we emphasize the need for restrictions on marriage which shall embody all those, as summarized in Mr. Galton's paper, to which human societies have already submitted, we have to consummate a further marriage—one of ideas; we have to combine what may appear to be incompatible aims. In the first place, in order to foster all that makes for a higher and nobler type of humanity than any that we have yet known how to realize, we must face the fact that some sacrifice of emotion, because relatively unworthy, is imperative. Else we weaken "the earnest desire not to infringe the sanctity and freedom of the social relations of a family group." But the sacrifice is of an emotion which has ceased to make for man and now makes for self or for reversion to the sub-human.

We are always confronted with a practical paradox. The marriage which makes for the highest welfare of the united man and woman may be actually inimical to the children of that union. The marriage which makes for the highest type of family, and its highest and fullest development, may often, and must always tend to, mean the inhibition of much that makes for individual perfection.

And since the children in their turn will be confronted by the same initial

difficulty, it may be desirable not only to define our aim and the best method of reaching it, but to suggest one or two simple prior considerations which are seldom taken into account. One of these is the fact that, speaking generally, human development is a development of the higher brain and its new organ, the hand. It may, I suppose, be said that the rest of the organism has not been correspondingly developed, but remains essentially on the animal level. What especially concerns us here is that this includes the uterine system, which has even tended to retrograde. Here, surely, we have the key to many social and ethical difficulties in the marriage question.

This relatively enormous complexity of brain, disturbing, or at least altering, the organic balance, coupled with the sexual incompleteness of the individual, has cost us dear. All such special developments involving comparative overgrowth must do this. In this case we have gained, of course, a priceless analytical, constructive, and elaborative faculty. But there seems to be many indications that we have correspondingly lost a direct and trustworthy reaction to the stimuli of nature in its widest sense—a reaction that should deserve the name of intuition as representing a practically unerring instinct. A eugenic advance secured by an increase of moral sensitiveness on the subject of parentage may well tend to restore on a higher level these primordial responses to excitation of all kinds. But, of course, it will still rest with education, in all senses and grades, either (as, on the whole, at present) to blunt or distort them, or to interpret and train them into directed and controlled efficiency.

At present our mental history seems to present a curious anomaly. On the one hand we see what, compared with the animal, and even with the lower intellectual human, types, is an amazing development of logical precision, ordered complexity of reasoning, rigorous validity of conclusion; all ultimately depending for their productive value on the validity of the presuppositions from which they start. On the other hand, this initial validity can but seldom, if ever, be proved experimentally or by argument, or established by universal experience. Thus the very perfection of the rational development is always liable to lead us farther and farther astray. The result we see in endless discussions which tend rather to divide than to unite us by hardening into opposed views of what we take for reality, and to confuse or dim the racial outlook and hinder the racial ascent.

It is to be hoped that one result of the creation of a eugenic conscience will be a restoration of the human balance, bringing about an immensely increased power of revising familiar assumptions, and thus of rightly interpreting experience and the natural world. This must make for the solution of pressing problems which at present cannot even be worthily stated. For there is no more significant sign of the present deadlock resulting from the anomaly just indicated, than the general neglect of the question of effective expression, and therefore of its central value to us; that is, what we are content vaguely to call its meaning.

Such a line of thought may seem, for the very reason of this neglect, far enough from the subject to be dealt with—from the question of restrictions in marriage. But in the research, studies, and discussions which ought to precede any attempt in the direction of giving effect to an aroused sense of eugenic responsibility, surely this factor will really be all-important. It must be hoped that such discussion will be carried on by those in whom what, for convenience sake, I would call the mother-sense, or the sense of human, even of vital, origin and significance, is not entirely overlain by the priceless power of co-ordinating subtle trains of reasoning. For this supreme power easily defeats itself by failing to examine and rectify the all-potent starting-point of its activities, the simple and primary assumption.

I have admitted that the foregoing suggestions—offered with all diffidence—seem to be far from the present subject of discussion, with which, indeed, I have not attempted directly to deal. I would only add that this is not because such questions have not the deepest interest for me, as for all who realize their urgency.

We shall have to discuss, though I hope in some cases privately, such questions as the influence on descendants of the existence or the lack of reverent love and loyalty between parents, not as “acquired characters,” in the controversial sense, but as giving full play to the highest currents of our mental and spiritual

life. We shall have to consider the possibilities of raising the whole moral standard of the race, so that the eugenic loyalty, shown in instinctive form on the sub-human plane, should be reproduced in humanity, consciously, purposively, and progressively. Finally we shall have to reconsider the two cults of self and happiness, which we are so prone to make ultimate. The truly eugenic conscience will look upon self as a means and an instrument of consecrated service; and happiness, not as an end or an ideal to strive for, since such striving ignobly defeats its own object, but—as sorrow or disappointment may also become—a means or a result of purifying and energizing the human activities to an extent as yet difficult to speak of.

MR. GALTON'S REPLY: This Society has cause to congratulate itself on the zeal and energy which have brought together such a body of opinion as is here represented. It is not only what we have heard tonight. We have had contributions from four eminent specialists: Dr. Haddon, Dr. Mott, Mr. Crawley, and Dr. Westermarck; men who have, all of them, written books which are well known. But this is not all. I have in my hands fifteen different written communications, all of which have been sent in by well-known persons. It was suggested that, as these could not be read, I might make a few remarks on the points in them that seemed more especially to call for observation. First of all, it gives me satisfaction to find that no one impugns the conclusion which my memoir was written to justify, that history tells how restrictions in marriage, even of an excessive kind, have been contentedly accepted very widely, under the guidance of what I called "immaterial motives." This is all I had in view when writing it.

Unfortunately, eugenics is a wide study, with an uncounted number of side issues into which those who discuss it informally are tempted to stray. If, however, sure advance is to be made, these issues must be thoroughly explored, one by one, and as little desultory discussion as possible should be indulged in. To change the simile, we have to deal with a formidable chain of strongholds, which must be severally attacked in force, reduced, and disposed of, before we can proceed freely.

Now, I am bound to say that the greater part of these comments deals with side issues, not relevant to the immediate purpose of the memoir. It would be discourteous to their authors to pass them over in total silence, though I am unable to discuss them properly, each in a short paragraph.

The first of these comments is that we might make great mistakes as to what is, and what is not, eugenics; therefore, that it is far too early to devise practical regulations. I cannot consider this to be an objection, for it is precisely what I have all along maintained. A partial though long list of subjects that need serious inquiry is given in my second memoir.

It is objected by many that there cannot be unanimity on the "points" that it is most desirable to breed for. I fully discussed this objection in my memoir read here last spring, showing that there were some qualities, such as health and vigor, that all thought desirable, and the opposite undesirable, and that this sufficed to give a first direction to our aims.¹² It is a safe starting-point, though a great deal more has to be inquired into as we proceed on our way.

It is also objected that if the inferior moiety of a race are left to intermarry, their produce will be increasingly inferior. This is certainly an error. The law of "regression toward mediocrity" insures that their offspring, as a whole, will be superior to themselves, and if, as I sincerely hope, a freer action will be hereafter allowed to selective agencies than hitherto, the portion of the offspring so selected would be better still. The influences that now withstand the free action of selective agencies include indiscriminate charity.

I wish that competent persons would severally take up one or other of the many topics mentioned in my second memoir, or others of a similar kind, and work it thoroughly out, as they would any ordinary scientific problem; in this way solid progress would be made. I must be allowed to re-emphasize my opinion that an immense amount of investigation has to be accomplished before a definite system of eugenics can be safely framed.

¹² *American Journal of Sociology*, Vol. X, p. —.

FROM MR. F. CARREL: I should like to ask Mr. Galton whether the general practice of eclectic mating might not tend to the production of a very inferior residual type, always condemned to mate together until eliminated from an existence in which they would be too unfitted to participate; and, if so, whether such a system can be adopted without inflicting suffering upon the more or less slowly disappearing residuum.

PROFESSOR YVES DELAGE,¹³ in a letter to Mr. Galton, wrote: I am delighted with the noble and very interesting enterprise which you are undertaking. I have no doubt that if in all countries the men who are at the head of the intellectual movement would give it their support, it would in the end triumph over the obstacles which are caused by indifference, routine, and the sarcasms of those who see in any new idea only the occasion for exercising a satirical spirit in which they cloak their ignorance and hardness of heart. . . .

We should translate "eugenics" into French by *eugonie* or *eugenese*. Could you not, while there is still time, modify the English term into "eugonics" or "eugenesis," in order that it might be the same in both languages?

I see with pleasure that you have had the tact to attack the question on the side by which it can be determined. Many years ago I had myself examined the subject that you prosecute at this moment, but I had thought only of compulsory, or rather prohibitive, means of attaining the object. . . . You are entirely right in laying aside, at least at the outset, all compulsory or prohibitive means, and in seeking only to initiate a movement of opinion in favor of eugenics, and in trying to modify the mental attitude toward marriage so that young people, and especially parents, will think less of fortune and social conditions, and more of physical perfection, moral well-being, and intellectual vigor. Social opinion should be modified so that the opprobrium of *mesalliance* falls, not on the union of the noble with the plebeian, or of the rich with the poor, but on the mating of physical, intellectual, and moral qualities, with the defects of these. , As you have so well put it, public opinion and social convention have a considerable prohibitive force. You will have rendered an incalculable service if you direct these toward eugenics.

The thing is difficult, and will need sustained effort. To impress the public, not only men of science must be asked to help, but those of renown in literature in all countries.

¹³ Professor of biology in the University of Paris.